## NOTE ON TROPICAL DISEASES IN SOUTHERN ITALY

BY

PROFESSOR UMBERTO GABBI, OF ROME.

(Received for publication 26 March, 1911)

For several years clinicians of Sicilian Universities (Gabbi, Giuffrè, Jemma) have called the attention of practising physicians and of the Government to certain diseases, as yet unknown, or very little known, which belong to the great chapter of tropical pathology. The first, which Gabbi, Giuffrè and their pupils made known, was Mediterranean fever, which, designated in Palermo by Federici as 'febbre miliare,' and by Tomaselli in Catania, as 'febbre continua sudorale epidemica,' was bacteriologically determined by my researches and by those of my pupils, and confirmed, principally, by the subsequent ones of Trambusti, Pollaci and Pulvirenti.

In Naples it had, from 1872, in which year it was discovered, twelve different designations; and only after my communication to the Medical Congress in Rome, in 1906, where, in consequence of a controversy between myself and Castellino, of Naples, aroused by my decisive affirmation that the 'febricola,' or 'Naples fever,' was nothing else than Mediterranean fever, Arnaldo Cantani, junr., undertook bacteriological researches, by which it was proved by Wright's sero-diagnostic method, and by blood culture, that the germ producing the infection was *Micrococcus melitensis*.

In 1901 Zando and Tiberti, in Florence, had isolated a micro-organism, which they identified as that of Bruce; in 1904 it was isolated by Professor Carbone in Pisa, from a patient coming from Catania, and who died in the medical clinic of Professor Queirolo; in 1905, by Cippitelli in Rome. After 1906 the question was much more seriously studied, and, from 1906 to 1910 it was found that Mediterranean fever was widely diffused in Sicily and Southern Italy, and is to be found also in Central Italy, especially in the provinces of Leghorn, Lucca and Florence; and in Upper Italy

(Bologna, Padua, Milan). During the same period (1906-1909) I have, with my pupils, made examinations of goats and have succeeded in demonstrating that amongst us, in Sicily and in Southern Italy, goats are infected, and not only those imported from Malta, but both those of our own country, and also the crossed ones. An approximate estimate, which my pupils are now making, by means of the milk test, in Sicily and Southern Italy, proves the high average of the infection (from 3 to 17 per cent.) in the goats which furnish milk to these populations, as they make use, almost exclusively, of goats' milk.

The symptoms which Bruce's septicaemia present among us are not so grave as those in Malta, and neither so extraordinary as those which our French colleagues describe in cases which, for two years, they have discovered in various departments of Southern France, and also in Paris.

Another disease, believed to be typically tropical, viz., Kala-azar was demonstrated five years ago among us by Pianese of Naples. He announced in 1905 at the Congress of Pathology in Rome, that he had found parasites in the spleen of children suffering from Anaemia splenica pseudoleucaemica, discovered by Professor Cardarelli in 1880, and afterwards designated by Fede under the name of Anaemia splenica infettiva. Two varieties were distinguished, one with fever and one without. Pianese found Leishmania, sp., in the first, and, in a paper published more than three years and a half afterwards, agreed with Nicolle's observations, considering it to be a species of Leishmania, and on morphological grounds named it Leishmania infantum, proposing to change also the name of the disease to Anaemia infantum a Leishmania, Pianese. In 1907, during a course of clinical lectures to practising physicians (of Sicily and Calabria), I stated the existence of Kala-azar in Sicily; and, in 1908, four months after Pianese's publication, I communicated twelve cases of Kala-azar, observed in Messina, Calabria and the Lipari Islands (two with Leishmania in the spleen), and afterwards my publications led to a full series of studies, which demonstrated how, in reality, the febrile variety of Anaemia splenica infantum is nothing else than Kala-azar. Contrary to Pianese's statements I and my scholars demonstrated : --

- I. That even youths and adults can be affected by *Kala-azar*, though very seldom.
- 2. That the disease appears at the beginning of Spring.
- 3. That it is greatly diffused in littoral towns of the South.
- 4. That it affected principally the lower classes.

Studies upon the agent of transmission of Leishmania are being actively pursued, and, besides the Cimex lectularius (Patton, Rogers), and Conorrhinus rubrofasciatus (Donovan), Basile implicates also Pulex serraticeps. At the same time that I discovered Kala-azar in Sicily and Calabria, Basile found Leishmania sp. in the dog.

A year afterwards, together with Dr. Lacava, we found cases of Oriental sore in Bovalino (Calabria) and Bordonaro (Messina), and others have observed them in various countries of Reggio Calabria (Palozzi, Bova), and in Catania and Palermo. I had the luck to observe the first example of multiple Oriental sore in a woman of a district near Messina (Tremesticri).

Besides these, typically tropical, sub-tropical, and endemic diseases, I found in Messina, in 1907, and described an epidemic of *Dengue fever* (150 cases) imported by merchants of Tripoli (Africa), and afterwards little epidemics were observed in Francavilla (Messina) and in Bovalino (Calabria).

In 1910 I have clinically recognised the three days' fever or Pappataci fever in an epidemic which attacked more than 4,000 persons, and which diffused itself along the Ionic Coast of Calabria on its eastern side. Examples of a summer fever, clinically corresponding to the fever caused by Phlebotomus had been for some years described by Italian military doctors, but the identity with the three days' fever was not yet declared by them before my publications. I think this will prove to be a summer disease which will regularly appear in Upper and Lower Italy; and, if the physicians of Central Italy would pay attention to it they would certainly discover it also.

I have observed and described undoubted cases of climatic bubo; Dr. Lacava has recently found in Calabria cases of *Ulcum tropicum* and of *Myiasis ocularis*.

The above-mentioned diseases are to be found likewise in North Africa, and this community of diseases is explicable if we consider that Arabs ruled for years in Sicily and Calabria; that commercial intercourse was, and is, ever more active between Sicily and Calabria and the Italian colonies of North Africa; that, moreover, intermarriage has taken place between Italians and women of African colonies. These data explain this area of common pathology, and so much the more when we consider that the climate and vegetation of North Africa and Sicily differ so very little, permitting of the existence of similar parasites, and, again, the habits of the classes which are the most affected by the described diseases are very alike.

These studies, begun in the Medical Clinic of the University of Messina, are now being continued, since the earthquake, in the Medical Clinics of Professor Baccelli in Rome, with the aid of the Government.

## LITERATURE

<sup>&#</sup>x27;Studi intorno alle malattie tropicali della Calabria e Sicilia.' Fasc. I, II, III.

<sup>&#</sup>x27; Malaria e malattie dei paesi caldi.' Edited by Prof. U. Gabbi. Rome, 1911.